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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/329,456	06/10/1999	MICHAEL PIERRE CARLSON	AT9-99-149	8115

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DUKE W. YEE
CARSTENS, YEE & CAHOON, L.L.P.
P.O. BOX 802334
DALLAS, TX 75380

EXAMINER

TANG, KENNETH

ART UNIT PAPER NUMBER

2127

DATE MAILED: 03/12/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/329,456

Applicant(s)

CARLSON ET AL.

Examiner

Kenneth Tang

Art Unit

2127

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-18 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11, 14-18, 20-24, 27 and 28 is/are rejected.
- 7) ☒ Claim(s) 12-13, 25-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This non-final action is in response to the paper filed 12/24/03, Amendment B.

Claims 1-5, 7-18, and 20-28 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 and 17 recite the limitation "single thread" in the first lines. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-2, 5, 11, 13-15, 18, 24, and 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Snyder et al. (hereinafter Snyder) (US 6,161,147).**

4. As to claims 1, 14, and 27, Snyder discloses a data processing system for monitoring a plurality of related threads with the following steps:

Art Unit: 2127

- polling the plurality or related threads for status information (*col. 1, lines 15-21, col. 6, lines 51-53*);
- responsive to receiving the status information, determining whether a thread within a plurality of related threads is inactive (*col. 3, lines 58-66 through col. 4, lines 1-8*);
- responsive to a determination that a thread within the plurality of related threads is inactive, initiating cleanup processes for the thread based on the status information (*col. 3, lines 58-66 through col. 4, lines 1-8, and col. 8, lines 42-58*).

5. As to claims 2 and 15, Snyder teaches responsive to receiving the status information, storing the status information (*col. 1, lines 44-49*).

6. As to claims 5 and 18, it is rejected for the same reasons as stated in the rejection of claim 1.

7. As to claims 11, 24, and 28, they are rejected for the same reasons as stated in the rejection of claim 1. In addition, Snyder teaches the inactivity is due to an event (*see Abstract*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2127

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. (hereinafter Snyder) (US 6,161,147) in view of Nation (US 6,233,599).

9. As to claims 3 and 16, Snyder teaches polling, determining and the initial steps but fails to teach performing those multiple operations on a single thread. However, Nation teaches using a single task to enable multiple operations (*see Claim 13*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of having multiple operations into a single thread for organizational purposes. It is more simplistic for related operations to be grouped together in one thread.

10. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Snyder et al. (hereinafter Snyder) (US 6,161,147).

11. As to claim 4 and 17, Snyder fails to explicitly teach having the single thread as part of a class. However, it is well known in the art that all threads can be part of a class because object oriented programming is well known.

12. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. (hereinafter Snyder) (US 6,161,147) in view of Neilsen (US 6,639,687 B1).

13. As to claims 7 and 20, Snyder fails to explicitly teach wherein the plurality of related threads is a plurality of printer threads. However, Neilsen teaches determining status information, determining whether the objects are active/inactive and then deletes objects associated with inactive tasks in relation to have the tasks as print jobs (*see claims 4 and 8*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use printer threads for the threads in the existing system so a printer can be used with the system.

14. Claims 8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. (hereinafter Snyder) (US 6,161,147) in view of Yee (US 5,471,576).

15. As to claims 8 and 21, Snyder fails to explicitly teach having the plurality of threads be video threads. Yee discloses a data processing system, which uses “video threads in the application program” (*col 4, lines 44-49*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use video threads for the threads in the existing system so that video can be used.

16. Claims 9-10 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al. (hereinafter Snyder) (US 6,161,147) in view of Win (US 6,182,142).

17. As to claims 9, 10, 22, and 23, Snyder fails to explicitly teach implementing this system with a virtual machine or Java virtual machine. Win teaches using a “Java Virtual Machine” (*col*

Art Unit: 2127

25, lines 50-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a virtual machine or Java virtual machine to the existing system for the reason of utilizing system independence; a Java application will run the same in any Java VM, regardless of the hardware and software underlying the system.

Allowable Subject Matter

18. Claims 12-13 and 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

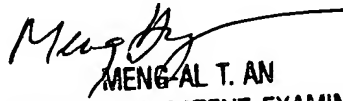
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The examiner can normally be reached on 8:30AM - 7:00PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2127

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
3/4/04


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100